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AMENDMENTS TO THE CLAIMS

1. (Currently Amended)   In an electronic device, a method, comprising the steps of:

providing input color data for a group of pixels in an input color space, wherein one or more pixels contain input color data that is repeated;

building an intermediate table for storing the input color data, wherein each different ~~said~~ input color data is assigned ~~stored at~~ an index in the intermediate table~~ed position, the indexed position being responsive to the input color data~~;

storing the indices in an index array, wherein each index is stored at a position corresponding to a position in the input color data;

building an intermediate palette for storing the input color data corresponding to the indices, wherein each input color data appears once in the intermediate palette;

converting the input color data in the intermediate ~~table~~ palette to an output color data in an output color space, wherein the same input color data in different pixels is converted once ~~stored once in the intermediate table~~ to avoid repeated conversion calculations for the different pixels having the same input color data; and

for each pixel in the group of pixels substituting the corresponding converted output color data for ~~each~~the input color data.

2. (Currently Amended)   The method of claim 1 further comprising the step of using a ~~host~~ hash function to determine the index~~ed position~~ in the intermediate table for each of the pixels in the group of pixels.

3. (Previously Presented)   The method of claim 1 wherein the input color space comprises a (R, G, B) color space.

4. (Previously Presented)   The method of claim 3 wherein the output color space comprises a (C, M, Y, K) color space.

5. (Previously Presented)   The method of claim 3 wherein the output color space comprises a (C, M, Y) color space.

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6. (Previously Presented)   The method of claim 1 wherein the input color space comprises a grey scale color space.

7. (Previously Presented)   The method of claim 1 wherein the output color space comprises a grey scale color space.

8. (Original)   The method of claim 1 wherein the electronic device is a computer system.

9. (Original)   The method of claim 1 wherein the electronic device is an image-reproducing apparatus.

10. (Original) The method of claim 1 wherein the electronic device is a copier.

11. (Original) The method of claim 1 wherein the electronic device is a printer.

12. (Original) The method of claim 1 wherein the group of pixels comprises a row of pixels.

13. (Currently Amended)   In an electronic device, a method, comprising the steps of:
        providing a set of input color data for pixels, said input color data encoding colors for the pixels in a first color space, wherein one or more pixels contain same color data that is repeated;
        for each of the pixels, determining an index for the pixel based on the color data for the pixel;
        building an intermediate table for ~~holding~~ assigning an index to the input color data; wherein the indices of the same input color data are the same ~~at a position of the index~~;
        storing the indices in an index array, wherein each index is stored at a position corresponding to a position in the input color data;
        building an intermediate palette for storing the input color data corresponding to the indices, wherein each input color data appears once in the intermediate palette;
        converting the input color data in the intermediate ~~table~~ palette into an output color data in a second color space, wherein the same input color data in different pixels is converted ~~held~~ once ~~in the intermediate table~~ to avoid repeated conversion calculations for the different pixels having the same input color data; and

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for each pixel, substituting the <u>corresponding converted</u> output color data for <s>the</s> <u>each</u> input color data.

14. (Original) The method of claim 13 wherein one of the first color space and the second color space is a (R, G, B) color space.

15. (Original) The method of claim 13 wherein one of the first color space and the second color space is a grey scale color space.

16. (Original) The method of claim 13 wherein one of the first color space and the second color space is a (C, M, Y, K) color space.

17. (Original) The method of claim 13, wherein the method is performed by a processor.

18. (Currently Amended)   A device for converting color representations of a set of pixels, comprising:

a storage facility for storing an intermediate table, wherein the intermediate table holds input color representations of a set of pixels <s>at positions of</s><u>coupled with</u> indices, <s>the indices</s> <u>each index representing a different input color data</u> <s>being responsive to the color representations of the set of pixels</s>;

a storage facility for storing an index array, the index array storing the indices, wherein each index is stored at a position corresponding to a position in the input color data;

a storage facility for storing an intermediate palette, the intermediate palette storing the input color data corresponding to the indices, wherein each input color data appears once in the intermediate palette; and

a conversion facility for converting the input color representations of the set of pixels in the intermediate <s>table</s><u>palette</u> to output color representations in a second color space, wherein the same input color representation in different pixels is <s>stored</s><u>converted</u> once <s>in the intermediate table</s> to avoid repeated conversion calculations for the different pixels having the same input color representation.

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19. (Original) The device of claim 18 wherein the conversion facility is implemented by a processor.

20. (Currently Amended)   An improved method of converting color image data for a group of pixels from a first color space to a second color space, comprising:

   mapping input color image data for the group of pixels in the first color space to indices, wherein the input color image data is stored in an intermediate table at positions of the indices,

   storing the indices in an index array, wherein each index is stored at a position corresponding to a position in the input color data;

   building an intermediate palette for storing the input color data corresponding to the indices, wherein each input color data appears once in the intermediate palette;

   converting converted the input color image data in the intermediate table palette to an output color image data in the second color space, wherein the same input color image data in different pixels is stored converted once in the intermediate table to avoid repeated conversion calculations for the different pixels having the same input color image data;

   reconstructing the group of pixels in the second color space using the corresponding converted output color data.

21. (Currently Amended)   The method of claim 20, further comprising a step of using a hash computer programming function to determine the indexed position in the intermediate table for each of the pixels in the group of pixels.

22. (Previously Presented)   The method of claim 21, wherein the indexed position of the pixels is also stored in an index array at a location in the index array that corresponds to a location in the group of pixels.

23. (Previously Presented)   The method of claim 20 wherein the first color space comprises a (R, G, B) color space.

24. (Previously Presented)   The method of claim 20 wherein the second color space comprises a (C, M, Y, K) color space.

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25. (Previously Presented)   The method of claim 20 wherein the second color space comprises
a (C, M, Y) color space.

26. (Previously Presented)   The method of claim 20 wherein the first color space comprises a
grey scale color space.

27. (Previously Presented)   The method of claim 20 wherein the second color space comprises
a grey scale color space.

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